Practitioner's Docket No. <u>MPI00-471P1RM (formerly 10147-61U1)</u> USSN: 09/970,287

IN THE CLAIMS:

This listing of the claims replaces all prior versions and listings of claims in the applications:

1-30. (Previously Canceled)

- 31. (Presently Amended): A method for identifying a candidate compound for modulating a proliferative disorder, the method comprising:
 - i) combining a compound to be tested with a sample comprising a polypeptide selected from the group consisting of:
 - a) a polypeptide which is at least 95% identical to the amino acid sequence of SEQ ID NO:2, wherein the polypeptide exhibits sulfatase activity; and
 - b) a polypeptide comprising a fragment of at least 400 contiguous amino acids of SEQ ID NO:2, wherein the polypeptide exhibits sulfatase activity;

under conditions suitable for binding detecting a sulfatase activity;

- ii) assessing the ability of the compound to <u>bind to the polypeptide</u> modulate the sulfatase activity; and
- iii) selecting a compound capable of <u>binding to the polypeptide</u> modulating the sulfatase activity;

thereby identifying a candidate compound for modulating a proliferative disorder, wherein the proliferative disorder is selected from the group consisting of tumor establishment, tumor growth, tumor metastasis, epithelial cell proliferation, endothelial cell proliferation, neuronal cell growth and wound healing.

- 32. (Previously Presented): The method of claim 31, wherein the sample is an isolated polypeptide, a membrane-bound form of an isolated polypeptide or a cell comprising the polypeptide.
- 33. (Previously Presented): The method of claim 32, wherein the cell is derived from a cell selected from the group consisting of a tumor cell, an epithelial cell, a vascular endothelial cell or a neuronal cell.

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34. (Previously Presented): The method of claim 33, wherein the tumor cell is selected from the group consisting of a colon tumor cell, an ovarian cancer cell, a breast cancer cell, a lung cancer cell, and a glioblastoma cell.

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- 35. (Previously Presented): The method of claim 33, wherein the neuronal cell is selected from the group consisting of an astrocyte, a neuron of the cerebral cortex, and a neuron of the hypothalamus.
- 36. (Presently Amended): The method of claim 31, wherein the compound is selected <u>from</u> [[for]] the group consisting of a small molecule, a peptide or an antibody.
- 37. (Previously Presented): The method of claim 31, wherein the polypeptide further comprises heterologous sequences.
- 38. (Presently Canceled)
- 39. (Presently Amended): A method for identifying a candidate compound for modulating a proliferative disorder, the method comprising:
 - i) combining a compound to be tested with a sample comprising a polypeptide comprising the amino acid sequence of SEQ ID NO:2;
 under conditions suitable for <u>binding detecting a sulfatase activity</u>;
 - ii) assessing the ability of the compound to bind to the polypeptide modulate the sulfatase activity; and
 - iii) selecting a compound capable of <u>binding to the polypeptide</u> modulating the sulfatase acivity;

thereby identifying a candidate compound for modulating a proliferative disorder, wherein the proliferative disorder is selected from the group consisting of tumor establishment, tumor growth, tumor metastasis, epithelial cell proliferation, endothelial cell proliferation, neuronal cell growth and wound healing.

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- 40. (Previously Presented): The method of claim 39, wherein the sample is an isolated polypeptide, a membrane-bound form of an isolated polypeptide or a cell comprising the polypeptide.
- 41. (Previously Presented): The method of claim 40, wherein the cell is derived from a cell selected from the group consisting of a tumor cell, an epithelial cell, a vascular endothelial cell or a neuronal cell.

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- 42. (Previously Presented): The method of claim 41, wherein the tumor cell is selected from the group consisting of a colon tumor cell, an ovarian cancer cell, a breast cancer cell, a lung cancer cell, and a glioblastoma cell.
- 43. (Previously Presented): The method of claim 41, wherein the neuronal cell is selected from the group consisting of an astrocyte, a neuron of the cerebral cortex, and a neuron of the hypothalamus.
- 44. (Presently Amended): The method of claim 39, wherein the compound is selected <u>from</u> [[for]] the group consisting of a small molecule, a peptide or an antibody.
- 45. (Previously Presented): The method of claim 39, wherein the polypeptide further comprises heterologous sequences.
- 46. (Presently Canceled)
- 47. (New): The method of any one of claims 31 or 39, wherein the binding of the test compound to the polypeptide is determined by a method selected from the group consisting of:
 - a) direct detecting of test compound/polypeptide binding;
 - b) a competition binding assay;
 - c) an immunoassay;
 - d) a yeast two-hybrid assay; and
 - e) an assay for hydrolysis of sulfate ester bonds.

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- 48. (New): The method of any one of claims 31 or 39, wherein the binding of the test compound to the polypeptide is determined by an assay for an activity of the polypeptide.
- 49. (New): The method of claim 48, wherein the polypeptide activity is sulfatase activity.

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